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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,383	08/05/2003	Christopher P. Desmarais	102513.57840US	8211

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CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER

KIM, SUN U

ART UNIT	PAPER NUMBER
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1723

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	12/28/2006	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/634,383

Applicant(s)

DESMARAIS, CHRISTOPHER P.

Examiner

John Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15, 23, 24, 26 and 27 is/are rejected.
- 7) ☒ Claim(s) 25 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.
2. Claim 23 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 23 depends on claim 1 which recites that "said first wall is unbounded by said second wall" which applicant asserted that a side wall 66 that is not connected in any manner with the cylindrical wall 60 (see pages 9-10, remarks filed 12/14/06). However, claim 23 recites that "said second wall adjoins said first wall and extends therefrom" which indicates a positive connection of the second wall and the first wall. Claim 23 does not further limit the subject matter of claim 1.
3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
4. Claims 1, 3-4, 7-9 and 23 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The first wall defining an aperture with an edge of the first wall in sealing engagement with the end of the housing critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Without the first wall (60) defining an aperture (58) with an edge (62) of the first wall (60) in sealing engagement with the end (15) of the housing (12), the first tube (22) cannot function as a return tube as intended (see Figures 1-2).

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5. Claims 5-6 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The first wall surrounding the first tube is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Without the first wall (60) surrounding the first tube (22) or an opening of the first tube (22), the first tube (22) cannot function as a return tube as intended (see Figures 1-2).

6. Claims 1-2, 4-9 and 23 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. A hole extending between the first and second sides and in fluid communication with the aperture and the first tube is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Without a hole (64) extending between the first (44) and second (46) sides and in fluid communication with the aperture (58) and the first tube (22), the filtered fluid cannot flow out to the first tube (22) i.e. a return tube as intended (see Figures 1-2).

7. Claims 1-9 and 23 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The filter media having a central opening, the end supporting a second tube in fluid communication with the cavity, a third tube at other end of the housing in fluid communication with the central opening are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). Without the filter media (32) having a central opening (52), the end (15) supporting a second tube (18) in fluid communication with the cavity (30), a third tube (20) at other end of the housing (12) in fluid communication with the central

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opening (52), the fluid to be filtered cannot flow into the second tube (18) i.e. inlet tube and the filtered fluid cannot flow out to the third tube (20) i.e. an outlet tube as intended (see Figures 1-2).

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claim 7 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Recitation of "said filter media arranged between said first and second tubes" is indefinite because the filter media (32) is arranged below the first and second tubes (22, 18) as shown in figure 1 and not between the first and second tubes (22, 18).

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 1-5, 7-10, 12-13, 15, 24 and 26-27 are rejected under 35 U.S.C. 102(b) as being anticipated by Hodgkins (US Patent No. 6,248,236 B1).

Regarding Claim 1, Hodgkins discloses a fluid filter assembly comprising: a housing (16) having an end (12) and defining a cavity; a first tube (28) supported by the end (12) and in fluid communication with the cavity; a diverter arranged within the cavity and including first and second sides with the first side proximate to the end (12), the diverter including a base (50) having a first wall (56) in the first side proximate to the first tube (28), the first wall (56) surrounding an opening associated with the first tube (28), the base including a first material (50)

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and the first wall (56) including a second material different than the first material (50) and which is supported on the first material (50), the first tube (28) in fluid communication with the second side, and a second wall (54) on the first side engaging the end (12) and provided by the second material (54), the second wall (54) defining a boundary where the second wall (54) seals against the end (12) and the first wall (56) is unbounded, i.e. not connected, by the second wall (54) and the filter media (60) having a portion supported by the second side, the second wall (54) fluidly separated from the opening by the first wall (56) and the filter media (60) wherein the base is an end cap (50) of one material and the first wall (56) and the second wall (54) are seals of another material (see Figure 1; col. 3, line 13 – col. 5, line 42).

Regarding claim 2, Hodgkins teaches that the first wall (56) is cylindrical and defines an aperture with an edge of the first wall (56) in sealing engagement with the end (12) of the housing (16) (see Fig. 1; col. 3, lines 49-55).

Regarding claim 3, Hodgkins teaches a hole (58) extending between the first and second sides and in fluid communication with the aperture and the opening (see Fig. 1; col. 5, lines 14-19).

Regarding claim 4, Hodgkins teaches that the second material (54, 56) defines at least a portion of the first side including the edge of the first wall (56)(see Fig.1).

Regarding claim 5, Hodgkins teaches a fluid filter assembly comprising: a housing (16) having an end (12) and defining a cavity; a first tube (28) supported by the end (12) and in fluid communication with the cavity; a diverter arranged within the cavity, the diverter extending along a longitudinal axis and including first and second sides with the first side proximate to the end (12), the diverter including a first wall (56) on the first side proximate to the first tube (28)

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and in sealing engagement with at least one of the first tube (28) and the end (12), the first tube (28) in fluid communication with the second side via an opening (58), wherein the first wall (56) is offset radially from the longitudinal axis and defines an aperture with an edge of the first wall (56) in sealing engagement with the end (12) of the housing (16), wherein the diverter includes a first material (50) and a second material (54, 56) secured to the first material (50), the second material defining at least a portion of the first side including the edge of the first wall (56), wherein the second material defines a side wall (54) spaced from the first wall (56) and in engagement with the end (12) of the housing (16) and the filter media (60) having a portion supported by the second side wherein the first material (50) is of an end cap (50) of one material and the first wall (56) and the side wall (54) are seals of another material (see Figure 1; col. 3, line 13 – col. 5, line 42).

Regarding claim 7, Hodgkins teaches that the filter media (60) includes a central opening with the first tube (28) offset from the central opening, the end (12) supporting a second tube (26) in fluid communication with the cavity and the filter media (60) arranged between the first and second tubes (28, 26) (see Fig. 1).

Regarding claim 8, Hodgkins teaches that the housing (16) includes a case defining the end (12) and a cover (82) opposite the end secured to the case, the cover supporting a third tube (see passage in cover (82)) in fluid communication with the cavity and the filter media (60) arranged between the second (26) and third tubes (see Fig. 1).

Regarding claim 9, Hodgkins teaches that the base (50) supports the filter media (60) with the first wall (56) comprising a gasket (56) e.g. seal supported by the base (50), the base (50) extending radially outwardly beyond the filter media (60) (see Fig. 1).

Regarding claim 10, Hodgkins teaches a fluid filter diverter comprising first and second sides spaced from one another, a first material (50) and a second material supported on the first material (50), the second material defining at least a portion of the first side, the filter media (60) supported by the second side, the first side having a first wall (56) defining an enclosed aperture with a hole (58) extending from the enclosed aperture to the second side, and the second material providing the first wall (56) and a second wall (54), the second wall (54) on the first side and the hole (58) outside the second wall (54) (see Fig. 1; col. 3, line 13 – col. 5, line 42).

Regarding claim 12, Hodgkins teaches that the filter media (60) defines a central opening and the second side includes a center tube (62) provided by the first material at least partially within the central opening, the first material providing a base (50) with the filter media (60) secured to the base (50) and the center tube (62) extending from the base (50) to provide a unitary structure (see Fig. 1; col. 3, lines 56-63).

Regarding claim 13, Hodgkins teaches that the first wall (56) is cylindrical with an edge of the first wall (56) defined by the second material e.g. sealing material (see Fig. 1).

Regarding claim 24, Hodgkins teaches that the center tube (62) extends along the longitudinal axis and the hole (58) is offset radially from the longitudinal axis (see Fig. 1).

Regarding claim 26, Hodgkins teaches that an adhesive is arranged on the second side and the filter media (60) is embedded in the adhesive securing the filter media (60) to the second side (see Fig. 1; col. col. 3, lines 56-63).

Regarding claim 27, Hodgkins teaches that the first wall (56) is unbounded by the second wall (54) (see Fig. 1) wherein “unbounded” is interpreted as “not connected”.

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12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 11 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hodgkins as applied to claim 10 above and further in view of Brown et al (US Patent No. 5,685,985). Hodgkins teaches the fluid filter diverter as described in above paragraph 11.

Regarding claim 11, Hodgkins teaches that the first material is of end cap (50) and the second material is of seals (54, 56) (see col. 3, lines 49-55). Claim 11 essentially differ from the filter diverter of Hodgkins in reciting that the first material is a plastic and a second material is an elastomer. Brown et al teach a fluid filter assembly comprising a second material supported on a first material wherein the first material is a plastic and the second material is an elastomer (see col. 5, lines 27-31). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the fluid diverter of Hodgkins with moldable material such as plastic as the first material for the end cap of Hodgkins and a sealable material such as rubber or elastomer as the second material for seals of Hodgkins since such materials are common in the filter art.

Regarding claim 15, Hodgkins teaches that second materials (54, 56) are mounted in concentric recesses formed on the end cap (see col. 3, lines 50-52). However, Hodgkins does not teach that the second material is adhered to the first material. Brown et al teach that the second material (50, 51) is adhered to the first material (44, 45) (see col. 5, lines 6-15). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify

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the fluid diverter of Hodgkins to adhere the second material to the first material to firmly secure or attach the sealing gaskets to the end cap as suggested by Brown et al (see col. 5, lines 6-15).

14. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hodgkins in view of Miller et al. (U.S. Patent No. 6,045,693).

Regarding Claim 6, Hodgkins discloses a fluid filter assembly comprising: a housing (16) having an end (12) and defining a cavity; a first tube (28) supported by the end (12) and in fluid communication with the cavity; a diverter arranged within the cavity and including first and second sides with the first side proximate to the end, the diverter including a first wall (56) in the first side proximate to the first tube (28) and in sealing engagement with the end, wherein the first wall (56) defines an aperture with an edge of the first wall (56) in sealing engagement with the end (12) of the housing (16), wherein the diverter includes a first material (50) and a second material secured to the first material, the second material defining at least a portion of the first side including the edge of the first wall (56); and a filter media (60) having a portion supported by the second side. However, Hodgkins does not disclose a second material defining a central wall extending away from the first wall and in engagement with the end of the housing. Miller et al teach a fluid filter assembly comprising a first material (37) and a second material (132) secured to the first material (37) (see Fig. 11) wherein the second material defines a central wall between pockets (146) extending away from the first wall e.g. annular ring (143). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the second material of Hodgkins with a central wall extending away from the first wall between pockets of Miller et al in the fluid filter assembly of Hodgkins to permit a weight and material

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reduction to lower the cost of the fluid filter assembly as suggested by Miller et al (see col. 10, lines 32-45).

Regarding Claim 14, Hodgkins discloses a fluid filter diverter comprising: first and second sides spaced from one another; a first material (50) and a second material (54, 56) supported on the first material (50), the second material defining at least a portion of the first side; and a filter media (60) secured to the second side, the first side having a first wall (56) defining an enclosed aperture with a hole (58) extending from the enclosed aperture to the second side, and the second material defining at least a portion of the first wall (56), wherein the second material defines a side wall (54) spaced from the first wall (56). However, Hodgkins does not disclose a second material defining a central wall arranged between the first wall and the side wall. Miller et al teach a fluid filter assembly comprising a first material (37) and a second material (132) secured to the first material (37) (see Fig. 11) wherein the second material defines a central wall between pockets (146) (see Fig. 16) and between the first wall e.g. annular ring (143) and the side wall around the central portion (145). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the second material of Hodgkins with a central wall between pockets and between the first wall and the side wall of Miller et al in the fluid filter diverter of Hodgkins to permit a weight and material reduction to lower the cost of the fluid filter assembly as suggested by Miller et al (see col. 10, lines 32-45).

15. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hodgkins as applied to claim 1 and further in view of Miller et al. Hodgkins discloses a fluid filter assembly as described in above paragraph 11. Hodgkins does not disclose that the second wall adjoins the first wall and extends therefrom. Miller et al teach a fluid filter assembly comprising a first

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material (37) and a second material (132) secured to the first material (37) (see Fig. 11) wherein the second wall i.e. a wall around the central portion (145) adjoins the first wall i.e. annular rings (143) and extends therefrom between pockets (146). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the fluid filter assembly of Hodgkins with the second wall adjoining the first wall and extends therefrom between pockets of Miller et al to permit a weight and material reduction to lower the cost of the fluid filter assembly as suggested by Miller et al (see col. 10, lines 32-45).

16. Claim 25 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

17. Applicant's arguments with respect to claims 1-15 and 23-27 have been considered but are moot in view of the new ground(s) of rejection. Applicant argues that the element 146 of Miller patent is not a central wall. The central wall of Miller et al is a central wall between pockets (146) extending away from the first wall e.g. annular ring (143) to the central portion (145), vice versa.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Kim whose telephone number is 571-272-1142. The examiner can normally be reached on Monday-Friday 7 a.m. - 3:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



John Kim
Primary Examiner
Art Unit 1723

JK

December 26, 2006